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RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/733,507
DATE: 12/21/2000
TIME: 08:41:11

Input Set : A:\81601-3.pct.seqlist.txt
Output Set: N:\CRF3\12212000\1733507.raw

3 <110> APPLICANT: Agriculture and Agri-Food Canada; The University of Saskatchewan
5 <120> TITLE OF INVENTION: Cyclin Dependant Kinase Inhibitors as Plant Growth
6 Regulators
8 <130> FILE REFERENCE: 81601-3
C--> 10 <140> CURRENT APPLICATION NUMBER: US/09/733,507
C--> 11 <141> CURRENT FILING DATE: 2000-12-02
13 <150> PRIOR APPLICATION NUMBER: CA 2,256,121
14 <151> PRIOR FILING DATE: 1998-12-31
16 <160> NUMBER OF SEQ ID NOS: 16
18 <170> SOFTWARE: PatentIn Ver. 2.0
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22 <212> TYPE: DNA
23 <213> ORGANISM: Arabidopsis thaliana
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47 Val Arg Lys Tyr Arg Lys Ala Lys Gly Ile Val Glu Ala Gly Val Ser
48 5 10 15
50 tca acg tat atg cag cta cgg agc cgg aga att gtt tat gtt aga tcg 153
51 Ser Thr Tyr Met Glu Leu Arg Ser Arg Arg Ile Val Tyr Val Arg Ser
52 20 25 30
54 gaa aaa tca agc tct gtc tcc gtc gtc ggt gat aat gga gtt tcg tcg 201
55 Glu Lys Ser Ser Ser Val Ser Val Val Gly Asp Asn Gly Val Ser Ser
56 35 40 45
58 tct tgt agt gga agc aat gaa tat aag aag aaa gaa tta ata cat ctg 249
59 Ser Cys Ser Gly Ser Asn Glu Tyr Lys Lys Lys Glu Leu Ile His Leu
60 50 55 60 65
62 gag gag gaa gat aaa gat ggt gac act gaa acg tcg acg tat cga cgg 297
63 Glu Glu Glu Asp Lys Asp Gly Asp Thr Glu Thr Ser Thr Tyr Arg Arg
64 70 75 80
66 gtg acg aag agg aag ctt ttt gaa aat ctg aga gag gag gag aaa gaa 345
67 Val Thr Lys Arg Lys Leu Phe Glu Asn Leu Arg Glu Glu Glu Lys Glu

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68          85          90          95
70 gaa tta agt aaa tcc atg gag aat tat tca tgc gaa ttt gaa tgc gcg 393
71 Glu Leu Ser Lys Ser Met Glu Asn Tyr Ser Ser Glu Phe Glu Ser Ala
72          100          105          110
74 gtt aaa gaa tgc tta gat tgt tgt tgc agc ggg agg aaa acg atg gag 441
75 Val Lys Glu Ser Leu Asp Cys Cys Ser Gly Arg Lys Thr Met Glu
76          115          120          125
78 gag acg gtg acg gcg gag gag gag aag gcg aaa ttg atg acg gag 489
79 Glu Thr Val Thr Ala Glu Glu Glu Lys Ala Lys Leu Met Thr Glu
80 130          135          140          145
82 atg cca acg gaa tgc gaa att gaa gat ttt ttt gtg gaa gct gag aaa 537
83 Met Pro Thr Glu Ser Glu Ile Glu Asp Phe Phe Val Glu Ala Glu Lys
84          150          155          160
86 caa ctc aaa gaa aaa ttc aag aag aag tac aat ttc gat ttc gag aag 585
87 Glu Leu Lys Glu Lys Phe Lys Lys Lys Tyr Asn Phe Asp Phe Glu Lys
88          165          170          175
90 gag aag cca tta gaa gga cgt tac gaa tgg gta aag tta gag 627
91 Glu Lys Pro Leu Glu Gly Arg Tyr Glu Trp Val Lys Leu Glu
92          180          185          190
94 tgaagaagaa gaagaagttt atggtttttt ttttaacttt tttagatttta atatttcagg 687
96 gaataagtta attttatitt gttgatttgg aaatataaga ttgttaggag gaattgtttt 747
98 agaagtaaga aattgcacag aaaaagaaga aagcttttta acagatttta gagccagaa 807
100 aagtcgtgtc ttttagctct acttttacct cttcttcgaa tcttgtgtat cttttagcat 867
102 attctttagt acatttttat gtttttggtg actgata 904
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115 20 25 30
117 Ser Glu Lys Ser Ser Ser Val Ser Val Val Gly Asp Asn Gly Val Ser
118 35 40 45
120 Ser Ser Cys Ser Gly Ser Asn Glu Tyr Lys Lys Lys Glu Leu Ile His
121 50 55 60
123 Leu Glu Glu Glu Asp Lys Asp Gly Asp Thr Glu Thr Ser Thr Tyr Arg
124 65 70 75 80
126 Arg Val Thr Lys Arg Lys Leu Phe Glu Asn Leu Arg Glu Glu Glu Lys
127 85 90 95
129 Glu Glu Leu Ser Lys Ser Met Glu Asn Tyr Ser Ser Glu Phe Glu Ser
130 100 105 110
132 Ala Val Lys Glu Ser Leu Asp Cys Cys Ser Gly Arg Lys Thr Met
133 115 120 125
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136 130 135 140
138 Glu Met Pro Thr Glu Ser Glu Ile Glu Asp Phe Phe Val Glu Ala Glu
139 145 150 155 160

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141 Lys Gln Leu Lys Lys Phe Lys Lys Lys Tyr Asn Phe Asp Phe Glu
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144 Lys Glu Lys Pro Leu Glu Gly Arg Tyr Glu Trp Val Lys Leu Glu
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151 <213> ORGANISM: Arabidopsis thaliana
153 <400> SEQUENCE: 3
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156 gtctccgtcg tcqgtgataa tggagtttcg tcgtottgta gtggaagcaa tgaatataag 120
158 aagaaagaaat taatacatct ggaaggagaa gataaagatg gtgacactga aacgtcgaag 180
160 tatcgacggg gtacgaagag gaaacttttt gaaaatctga gaagaggaga gaaagaagaa 240
162 ttaagtaaat ccattggaga ttattcatcg gaatttgaat cggcgggtta agaatcgta 300
164 gattgttttl gtacggggag gaaaacgatg gaggagacgg tgacggcgga ggaggaggag 360
166 aagggcgaat tgatgacgga gatgccaaag gaatcggaaa ttgaagattt tttgtggaa 420
168 gctgaagaaac aactcaaaag aaaaattcaag aagaagtaca atttcgattt cgaagaaggag 480
170 aagccattag aaggaaggtt cgaatgggta aagtttagag gaagaagaag aagaagttta 540
172 tgggtttttt ttaactttt tagattttta ttttcaggg aataagttta ttttattttg 600
174 ttgatttqga aatataagat ttgtaggagg aattgtttta gaaqlacgaa attgcacaga 660
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178 <211> LENGTH: 443
179 <212> TYPE: DNA
180 <213> ORGANISM: Arabidopsis thaliana
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185 gtctccgtcg tcqgtgataa tggagaattt ttracggaa ttggaatcgg cggttaaaag 120
187 atcgttagat tgtttgttga ggggagga aacgatgga gacggtga cggcggagg 180
189 ggaggagaag gcaaaattga tgacggagat gccaacgaa tcggaaattg aagattttt 240
191 tgtggaagct gagaacaac tcaagaataa attcaagaag aagtacaatt tcgatttcga 300
193 gaaggagaag ccattagaag gacgttacga atggglaaag ttgaagtgaa gaagaagaag 360
195 aagtttatgq tttttttttt aactttttta attttaatat ttcagggaat aagttta' tt 420
197 tttttgttg atttgyaat ata 443
200 <210> SEQ ID NO: 5
201 <211> LENGTH: 377
202 <212> TYPE: DNA
203 <213> ORGANISM: Arabidopsis thaliana
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208 agaattaaat aaatccatgg agaattattc atcggaattt gaatcggcgg ttaaaqaatc 120
210 gttagattgt tgttttagcg ggaggaaaac gatggaggag gaggaggaga aggcgaaatt 180
212 gatgacggag atgccaaag aatcggaat tgaagattt tttgtggaa ctgagaaaca 240
214 actcaagaa aaattcaaga agaagtacaa ttctgattt cgaagaaggaga agccattaga 300
216 aggcggttac gaatgggtta agttagagtg aagaagaaga agaagtttat ggtttttttt 360
218 ttaacttttt agatttt 377
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222 <211> LENGTH: 755
223 <212> TYPE: DNA
224 <213> ORGANISM: Arabidopsis thaliana

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231 cctccggttg aagaacagtg tcaaatcgaa gaagaagatt cgtcgggttc gtgtgtttct 180
233 acatcggaag agaaatcgua acggagaatc gaatttgtag atcttgagga aaataacggt 240
235 gacgatcgtg aaacagaaac gtctgtgatt tacgatgatt tgaataagag tgaggaaatc 300
237 atgaacatqg attctcttc qgtggtgtt gaaqatqtag aqtcicqccg caqgttaaq 360
239 aaqagttctc atgagacggt gaaggaaact qagttagaag acttttttca ggtcgcgga 420
241 aagatcttc ggaataagtt gttggaatgt tctatgaagt ataacttca tttcgagaaa 480
243 gatgagccac ttggtggagg aagatacgag tgggttaaat tgaalccatg aagaagacga 540
245 tgatgataat gatgatcatt gttttacca aagtacttat tatttctctt ctgtaataat 600
247 ctttgccttg attttctctt taacaaaatc caaatqtaga tatcttctc tcgaataatc 660
249 aataacatgt aattcaactt ttgtttgtac ttcttgagg taattaatta gattcgtgtt 720
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255 <211> LENGTH: 824
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264 cttaatgatt ctctctgatt atcaccggac tctcatgacg tcatcgtctt cgcggtttca 180
266 tcttcttcct ttgcttcgtc ggcggcttta gctctgatg aatgttccgt taccatcggt 240
268 ggagaaagaa ylgatcagtc ctcgaglate agtcccggtt gtttcaccau tgaatcgaaa 300
270 gaaatcgaga agaacagttc qtcgtttggt gtaqatctcg aggatcatca aatcgaaacc 360
272 gaaaccgaaa cctcaacatt catcaccagc aatttcagaa aagagacgag tccagtgagt 420
274 gaggglltgg gagaacacac aacagaaatg gaatcalcat cgcgaacgaa gagaanaaaa 480
276 cgggggggtg ggaagactcc aacggcgggc gagattgagg atttgttctc ggaagctaga 540
278 agtcaagacg ataagaagaa gcaattcata gaaaagtaca acttcgatat tgtcaatgac 600
280 gaaccgcttg aaggctcgta caagtgggat cgactttaag ccatacaaaa gcaaatacca 660
282 tccatgaaga agacaaaaa aaaaataggt ttgttttctg ttgttaacat ttcactttgt 720
284 acagctctag tctatttctc tttaaaaaac tatgttacta qttcgtacaa aacaaaaaaa 780
286 aaaaacacac cttttataatg aaatttcgga tcttggtctac taaa 824
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290 <211> LENGTH: 642
291 <212> TYPE: DNA
292 <213> ORGANISM: Arabidopsis thaliana
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297 gattctgagt acgaaggatc aaacatcaag aggatgagac tccatgatga tgatgacgtt 120
299 ttaagctcac cgaagagaac tctttctct tcttctctt ctctctggc ttaactcggt 180
301 tcagattccg gaggtttctg ctccgtcgcg ttatctgaag aagaagacga tcatctaaac 240
303 tcaagcatca gctctggttg ttccagcagc gaaactaacg aaatcgttac tctcttcca 300
305 ttltcagatc tggaggtctc tgaalctcc gaaaccgaaa tctcaacgtt actcaccac 360
307 aatttcagga aacagggaat ttcatcaagc gagaatcttg gagaacacgc agaatgagc 420
309 tcggcgacga cggagatgag agatcagaga aagacggaga agaagaagaa gatggaaaa 480
311 tcaaccagc aggcagagct tgatgacttt ttctcggcg cggaagagata cgaacagaaa 540
313 cgattcacag aaaagtacaa ctacgacatc gtcaatgata cgcgcgttga aggtcggtag 600
315 cagtgggtta gtctgaacc ttgaagcca tggagaaca aa 642

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Input Set : A:\81601-3.pct.seqlist.txt
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328 aacagtctcg gttttgaatc aagacacagc acaagggaag gcacgccttg taactttgtt 180
330 gaggatattg agatcatggt tacaccaggg tctagcacga ggctgatgtg cagaqcaacc 240
332 aaagagtaca caagggaaca agataacgtg atcccgacca ctagtgaat ggaggagtgc 300
334 ttgcatatg cagagcagca gcaacagagg ctattcatgg agaagtacaa cttcgacatt 360
336 gtgaatgata tccccctcag cggacgttac gaatgggtgc aagtcaaac atgaagttca 420
338 aaaggaaaca gctccaaaag acatgggtgt aagtttagaga attgtgatgg agtttaacag 480
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356 35 40 45
358 Ser Ser Cys Ser Gly Ser Asn Glu Tyr Lys Lys Lys Glu Leu Ile His
359 50 55 60
361 Leu Glu Glu Glu Asp Lys Asp Gly Asp Thr Glu Thr Ser Thr Tyr Arg
362 65 70 75 80
364 Arg Gly Thr Lys Arg Lys Leu Cys Glu Asn Leu Arg Glu Glu Glu Lys
365 85 90 95
367 Glu Glu Leu Ser Lys Ser Met Glu Asn Tyr Ser Ser Glu Phe Glu Ser
368 100 105 110
370 Ala Val Lys Glu Ser Leu Asp Cys Cys Cys Ser Gly Arg Lys Thr Met
371 115 120 125
373 Glu Glu Thr Val Thr Ala Glu Glu Glu Glu Lys Ala Lys Leu Met Thr
374 130 135 140
376 Glu Met Pro Thr Glu Ser Glu Ile Glu Asp Phe Phe Val Glu Ala Glu
377 145 150 155 160
379 Lys Gln Leu Lys Glu Lys Phe Lys Lys Lys Tyr Asn Phe Asp Phe Glu
380 165 170 175
382 Lys Glu Lys Pro Leu Glu Gly Arg Tyr Glu Trp Val Lys Leu Glu
383 180 185 190
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387 <211> LENGTH: 176
388 <212> TYPE: PRT
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VERIFICATION SUMMARY
PATENT APPLICATION: US/09/733,507

DATE: 12/21/2000
TIME: 08:41:12

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L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date